



## ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-7F  
UNIQUE ID NUMBER: 1PW023  
COMBUSTOR: Mod VI  
ENGINE TYPE: TF

BYPASS RATIO: 5.1  
PRESSURE RATIO ( $\pi_{co}$ ): 22.8  
RATED THRUST ( $F_{oo}$ ) (kN): 213.5

## REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>oo</sub> (g/kN) or SN	70.1	153.6	73.1	20.8
AS % OF ORIGINAL LIMIT	357.7	130.2	85.4	108.2
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			106.7	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			131.8	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			149.7	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			182.8	

## DATA STATUS

x PRE-REGULATION  
- CERTIFICATION  
x REVISED (SEE REMARKS)

## TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES  
x DEDICATED ENGINES TO PRODUCTION STANDARD  
- OTHER (SEE REMARKS)

## EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
(ANNEX 16 VOLUME II)

## CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
x OUT OF PRODUCTION (DATE: - )  
- OUT OF SERVICE (DATE: - )

## MEASURED DATA

MODE	POWER SETTING (%F <sub>oo</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
TAKE-OFF	100	0.7	2.161	0.00	0.90	41.70	16.0
CLIMB OUT	85	2.2	1.779	0.00	0.90	31.50	
APPROACH	30	4.0	0.624	0.60	5.80	9.10	
IDLE	7	26.0	0.232	25.90	68.60	3.20	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			837	9464	25989	13703	-
NUMBER OF ENGINES				1	1	1	
NUMBER OF TESTS				1	1	1	
AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX)				45.5	125.1	63.1	16.0
SIGMA (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)							

## ACCESSORY LOADS

POWER EXTRACTION 0 (kW)  
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS  
AT - POWER SETTINGS

## ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	
ABS HUMIDITY (kg/kg)	

## FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney  
TEST ORGANIZATION: P&WA  
TEST LOCATION: East Hartford, CT  
TEST DATES: 16/09/1980

## REMARKS

1. Mod VI combustor

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '- ' if information is not available)